II. AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A self-enhancing search system comprising:

a search system analysis system that periodically looks through a log of search queries of the search system and identifies, for analyzing, unsatisfactory customer search queries that do not bring satisfactory results from a database being searched by customers;

a search query analyzer using synonyms and optionally, one or more of glossary terms, known typographical errors and translated words to provide alternative query terms to original search query terms in the unsatisfactory customer search queries;

a relevant document finder based on enhanced queries including the alternative query terms to locate relevant documents in the searched database not found when the unsatisfactory customer search queries were used; and

embedding in located relevant documents not found by the unsuccessful search queries those of the original unsuccessful search query terms not contained in those relevant documents.

2. (Canceled)

3. (Canceled)

4. (Previously Presented) The search system of claim 1 including associating enhanced queries with the unsatisfactory search queries in the search system log for use with further queries.

5. (Previously Presented) The search system of claim 4 including ranking the results of searches using both the unsatisfactory and the enhanced search queries.

6. (Previously Presented) The search system of claim 5 wherein the search query analyzer comprises a module including:

a sub-module that identifies domain specific terms in a given unsuccessful search query, using a domain specific glossary;

a sub-module that finds synonyms and related terms for the identified domain specific terms, a using domain specific thesaurus;

a sub-module that finds other statistically close terms; and

a sub-module that identifies relevant domain specific categories for the identified terms, using a domain specific ontology.

7. (Previously Presented) The search system of claim 6 wherein the relevant document finder comprises a module including the following sub-modules:

a sub-module that finds the relevant documents in the identified categories, using an original textual index; and

a sub-module that filters the found relevant documents to find additional relevant documents, based on the identified domain specific terms, synonyms, related terms and statistically close terms.

8. (Previously Presented) The search system of claim 7, including a linking meta-data enhancer with the following sub-modules:

a sub-module that creates associations (links) between each found relevant document and the given unsuccessful search query; and

a sub-module that adds new doc-query links to the meta-data of the corresponding textual index entries.

9. (Previously Presented) A computer program on a computer useable medium for providing a self-enhancing search system comprising:

a search system analog system software module that periodically looks through a log for the search system and selects for analyzing unsuccessful customer search queries;

a search query analyzer software module using synonyms and optionally, one or more of glossary terms, known typographical errors, and translated words to provide alternative query terms to the terms using in the unsuccessful search queries;

relevant document finder software module using enhanced queries including the alternative query terms to locate relevant documents not found using said unsuccessful customer search queries; and

software for embedding search query terms of the unsuccessful queries in the documents located by the enhanced queries and not found by the unsuccessful customer search so that the documents located by the enhanced queries will be found if the unsuccessful customer search queries are repeated.

10. (Canceled)

11. (Canceled)

12. (Previously Presented) The computer program for the search system of claim 9 including software for providing associated enhanced keyword queries with keywords from the unsatisfactory queries in the search system log for use in connection with further customer queries.

13. (Previously Presented) The computer program for the search system of claim 12 including software for ranking the results of searches in order of their pertinency using the enhanced keyword query terms as a ranking basis.

14. (Previously Presented) The computer program for the search system of claim 13 wherein the search query analyzer software module comprises:

a software sub-module that identifies domain specific terms in a given query, using a domain specific glossary;

a software sub-module that finds synonyms and related terms for the identified terms, using a domain specific thesaurus;

a software sub-module that finds other statistically close terms; and

a software sub-module that identifies relevant domain specific categories for the identified terms, using a domain specific ontology.

15. (Previously Presented) The computer program for the search system of claim 14, including a document finder module that comprises the following software sub-modules:

a software sub-module that finds documents in the identified categories, using the original textual index; and

a software sub-module that filters the found documents to find additional relevant documents, based on the identified domain specific terms, synonyms, related terms and statistically close terms.

16. (Previously Presented) The computer program for the search system of claim 15, wherein a meta-data enhancer module comprise the following sub-modules:

a software sub-module that creates associations (links) between each found document and the given query; and

a software sub-module that adds new doc-query links to the meta-data of the corresponding textual index entries.

17. (Previously Presented) A self-enhancing search system comprising:

a search system analysis system that periodically looks through a search system log and identifies for analysis unsatisfactory customer search queries that do not cite more than a specified number of documents;

a search query analyzer using synonyms and optionally, one or more of glossary terms, synonyms, known typographical errors, and translated words to provide alternative query terms to original search query terms of the unsatisfactory customer search queries identified by the search system analysis system;

a relevant document finder based on enhanced queries including the alternative query terms to locate relevant documents not found by the original unsatisfactory customer search queries identified by the search system analysis system; and

a meta-data enhancer creating separate enhanced links to one or more of said relevant documents linking to said relevant documents the original terms of the unsatisfactory search queries and not found in the relevant documents so that future search queries using the original terms will result in finding said relevant documents not found by the unsatisfactory customer search queries.

18. (Previously Presented) The search system of claim 17, wherein said meta-data enhancer links the alternative query terms to the original query terms to automatically locate said relevant documents.

19. (Previously Presented) The search system of claim 18, wherein the relevant document finder comprises the following sub-modules:

a sub-module that finds documents in identified categories, using the original terms; and

a sub-module that filters the found documents to find additional relevant documents, based on the enhanced terms including one or more specific domain terms, synonyms, related terms and statistically close terms.

20. (Previously Presented) The search system of claim 19, wherein the meta-data enhancer comprises the following sub-modules:

a sub-module that creates associations (links) between each found document and the original query; and

a sub-module that adds new links to the meta-data of the corresponding textual index entries.